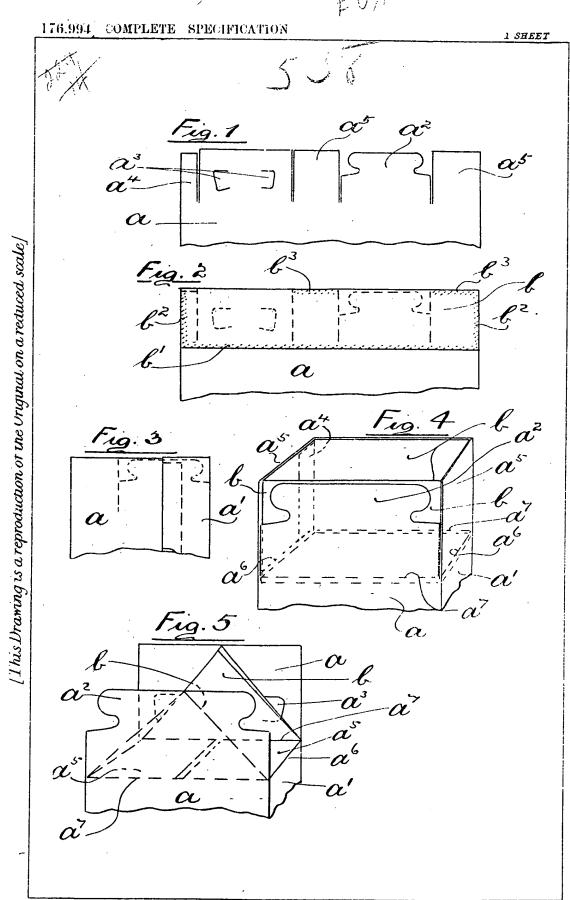
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Malby&Sons, Photo-Litho

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# PATENT SPECIFICATION



No. 3879 / 21. Application Date: Feb. 2, 1921.

176,994

Complete Left: Apr. 20, 1921. Complete Accepted : Mar. 23, 1922.

#### PROVISIONAL SPECIFICATION.

### Improvements relating to Cartons or Cases for Containing Domestic and other Commodities.

I, Alfred Eva, British subject, of 60 to 68, City Road, Manchester, do hereby declare the nature of this invention to be as follows:-

The invention relates to cartons or cases for containing commodities, which cases are provided with folding ends or parts whereby the same may be closed, as is well understood.

It is well known that material loosely packed in the case may possibly escape therefrom by passing through the apertures existing between the various parts of the case end of the folding character, 15 and also that material in the case may become damp on account of said apertures.

The object of my invention is to provide means whereby these apertures are 20 covered over, or to form the case ends or parts with means which, when the latter are in the open condition, constitute a continuation of the case itself.

For this purpose, I attach to the inner 25 or outer faces of the case, near the open ends thereof, a paper or flexible lining, such as thin and closely woven fabric, which lining passes completely round or along the sides of the case, and extends 30 beyond the ordinary open ends thereof to an extent preferably equal to the length of the flaps or end portions to be folded over. This lining being flexible, does not interfere with the folding over of the parts 35 named, but naturally becomes creased, or may be creased as to allow said folding operation to be accomplished. In other words, the ends of the case usually employed operate to bend over with the 40 flexible lining.

In this way the case may be closed in

at the ends without the existence of apertures where a bent over part of the case end abuts against a similar and other part.

In applying the lining, in the first instance, I may do so when the material of the box or casing is in the open out condition prior to being folded into the form of a case. In such circumstances, a 50 strip of the flexible lining may be attached along an edge, and so as to project beyond the ends or edges of the normal sides of the case, the amount of projection being preferably equal to the 55 length of the flaps to be folded in. The lining may be attached by adhesive say to one or more of these flaps on their inner sides, and when the closing side of the case itself overlaps a longitudinal 60 strip of another and adjacent side, as is common the lining is capable of being attached finally by or to the closing side.

In practice, with a case provided according to my invention, it is con- 65 venient to hold apart an opposite pair of flaps while the other pair, with the lining at such part, are folded over and inwards. The lining itself may also be creased with the finger just prior to said folding 70 operation.

Variations in the shape of the lining named, its area, and the shape of the box to which it is applied, and also the material forming said lining, without 75 departing from the nature of the invention.

Dated this 31st day of January, 1921.

WILLIAM GADD & SONS, 62, Barton Arcade, Manchester, Agents,

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[Price 1/-]

#### COMPLETE SPECIFICATION.

## Improvements relating to Cartons or Cases for Containing Domestic and other Commodities.

I, ALFRED Eva, British subject, of 60 to 68, City Road, Manchester, do hereby declare the nature of this invention and in what manner the same is to be 5 performed, to be particularly described and ascertained in and by the following statement:--

The invention relates to cartons or cases for containing commodities, which 10 cases are provided with folding ends or parts whereby the same may be closed, and with linings extending beyond the normal length of the case before they are Such linings have prefolded down. 15 viously been attached both to the carton and to the end flaps, or to the carton only.

The object of my invention is to provide a particular attachment of the lining to said flaps whereby leakage of con-20 tents from the case is more effectively

prevented.

According to my invention, I provide a flexible lining to the case as heretofore, which passes completely round or along 25 the sides of the case, and extends beyond the ordinary open ends or parts to an extent preferably equal to the length of the flaps or end portions intended to be folded over for closing the case, but such 30 lining as well as being attached to the body of the case is attached to a pair of opposite end flaps as described herein.

With reference to the accompanying drawings, Fig. 1 is a view in elevation of 35 the upper portion of a well known form of case or carton, before it is bent over by being passed through a box-making

machine.

Fig. 2 is a similar view, but with an 40 attached flexible lining according to my

Fig. 3 is a view of the case material after it has been bent over in flat form for storage or supply.

Fig. 4 is a perspective view, on a larger scale, to the foregoing figures, showing the open end of the case, with my flexible lining in place, said view being turned about as regards Fig. 3.

Fig. 5 is a similar view, but with two opposing flaps turned in, in the process of closing the end indicated.

a is the material forming the case in the ordinary way. The parts at of said

material here form the short sides of said case, and  $a^2$  and  $a^3$  are respectively the cut-out and divided parts forming a common form of lock for the case.

b is the flexible lining, which may be composed of paper, fabric, or as desirable.

As illustrated, each open end part of the case, as in Fig. 1, has an area of lining applied to it. In the case of Fig. 2, and according to my invention, said lining in the form of a strip is attached to the material a. a4, a5, by means of adhesive, the parts of said lining b so attached being here indicated by the portions shown hatched by broken lines. That is to say, the lining b is attached along an edge  $b^1$  in Fig. 2 aforesaid to the case, and I also attach it at  $b^2$  and  $b^3$ , to what are ultimately a pair of opposite end flaps, either to the full extent indicated or partly so.

It will be seen that the lining b so applied projects beyond the position of the top or open end of the box when the latter is completely formed, and that the extent of said projection is here about equal to that of the flaps at the end of

the box.

Reference to Figs. 1 and 4 will show that the part  $a^{+}$  of the case comes between the side flap  $a^5$  and the lining b. These side flaps are capable of being folded in about lines at, while the front and back flaps are capable of being folded in about lines  $a^{\dagger}$ , as is well understood.

It will be seen that, when the flaps are in the upright condition, as in Fig. 4, the lining b forms an unbroken continuation of the tube or case attached to the

latter as described.

For closing the same, the front and back flaps may be held apart by the fingers of the operator, while the side flaps  $a^{5}$  are turned inwards, as in Fig. 5. the lining b being creased in the V form which it tends to take as such turning in operation occurs, since such lining is attached to flaps  $a^5$ .

The front and back flaps may then be turned in, along with said V parts of the lining b, so that the latter parts are situated below the front and back flaps.

but above the side flaps.

It may be desirable for the upper edge

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## ng Domestic

ort sides of said respectively the rts forming a the case.

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which may be or as desirable. en end part of has an area of In the case of my invention, of a strip is  $-a, a^4, a^5, by$ orts of said linre indicated by hed by broken he lining b is in Fig. 2 aforelso attach it at imately a pair her to the full

he lining b so he position of box when the 4, and that the is here about at the end of

ad 4 will show comes between uing b. These eing folded in front and back olded in about ood.

n the flaps are as in Fig. 4, oken continuatached to the

the front and 95 spart by the hile the side . as in Fig. 5. 'n the  ${f V}$  form such turning 100 such lining is

may then be I **V** parts of tier parts are 105 ad back flaps.

te upper edge

portion of the lining to be additionally supplied with paste or adhesive for complefely shutting in the contents of the case when the ends are closed. By the 5 means described, a case more free from possible leakage of contents than heretofore is provided, when closed.

Having now particularly described and ascertained the nature of my said inven-10 tion and in what manner the same is to be performed, I declare that what I claim is:-

A carton or case for containing domestic

and other commodities, and having a flexible lining extending beyond its open 15 end before being folded down, in which said lining is pasted or attached to the casing, and to a pair of opposite end flaps thereof, for the purpose and in manner substantially as herein illustrated 20 and described.

Dated this 19th day of April, 1921. WILLIAM GADD & SONS, 62, Barton Arcade, Manchester,

Agents.

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